U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT ASSISTANT SECRETARY FOR HOUSING-FEDERAL HOUSING COMMISSIONER

DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

Series and Series Number:

materials release No. 1258a

ISSUE DATE: March 13, 1997

REVIEW DATE: March 13, 2000

SUBJECT:

1. Product "Durawall One Coat" Stucco System

2. Name and Address of Manufacturer

American Building & Cement Products, Inc. 3807 W. Lower Buckeye Road Phoenix, AZ 85009

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, approval or acceptance by MUD of the described product, and any statement or representation, however made, indicating such approval, endorsement or acceptance by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

<u>USE</u>: A combination insulation and wall finish stucco system for application to exterior walls.

DESCRIPTION:

The Durawall One Coat Stucco System is a five component system which consists of a substrate, polystyrene insulation board, metal lath, fiber glass reinforced stucco exterior coating, and joint systems including caulks and sealants. The exterior coating is a minimum of 3/8" thick.

GENERAL CONDITION:

The Durawall system shall be designed and built in accordance with American Building & Cement Products, Inc. specification and typical details except where modified by this Materials Release (MR). The system shall be installed by an applicator who is approved by the American Building & Cement Products, Inc. American Building & Cement Products, Inc. shall be responsible for certifying that the polystyrene insulation board meets the requirements of this MR. American Building & Cement Products, Inc. shall maintain a current list of approved sealant systems which are compatible with the Durawall system, and shall certify that the sealant is in compliance with the American Building & Cement Products, Inc. sealant requirements. The Durawall system shall be in compliance with Table 1.

American Building & Cement Products, Inc. shall certify that the specified substrate is suitable for the application of the system. All joints shall be designed and constructed on the assumption that a leak can occur in the primary seal. A secondary seal or other defense against leaks shall be provided together with a built-in means of disposing of the leakage.

TABLE 1 - Requirements for Durawall One Coat Stucco System

<u>Material Requirements</u> (if used) Fiber cement board or	<u>Values</u> compliance	Test Method ASTM C-1186
Gypsum sheathing	compliance	ASTM C-79
Metal lath	compliance 1" x 20	
	ga. acceptable	ASIM C-047
Polystyrene foam insulation board	compliance	UM-71a-94
Density, minimum	1.5 lbs/cu. ft.	
Thickness, minimum	1 inch	
Sand	compliance	ASTM C-144
Caulks and sealants, minimum	Type S Grade NS	ASTM C-920
,	20 year warranty	
Portland cement	Type I, II-I, or II	ASTM C-150
Finish pigments	UV stable 2000 hrs.	ASTM G-23
Coating thickness	3/8" minimum	ASTM C-150
•		
System Requirements	Values	Test Method
Wind loading	no damage at 50 psf	
Surface impact	no damage with 30 lb.	ASTM E-695
	weight at 6 ft.	
Fungus resistance	no growth after	ASTM D-3273
	42 days	

APPLICATION REQUIREMENTS:

The finish coat can be an acrylic latex based material containing quartz and marble/aggregate, and shall be applied at the rate of 4 1/2 gallons/100 sq. ft.

INSTALLATION:

- 1. The installation of the Durawall One Coat Stucco System shall be in accordance with the manufacturers installation instructions. The system shall be installed by applicators that have been approved by the manufacturer.
- 2. The system shall be delivered to the job site in bulk mixers or packages with the name of the manufacturer, address, installation instructions, compliance to this MR and with a warranty statement.
- 3. The substrate surface shall be determined by the manufacturer, to be free of release agents and other residues and in all other ways suitable for application of the system. The system shall only be applied to those substrates approved by the manufacturer.
- 4. No additives, or materials of any kind, such as binders, antifreeze agents, accelerators, fillers, etc. except specified amounts of clean water, shall be allowed unless specifically approved by the manufacturer.
- 5. The ambient temperature shall be 40° Fahrenheit or greater and rising at the time of application but not greater than 110° Fahrenheit and shall remain so for at least 24 hours thereafter. The manufacturer shall be responsible for making any disputed determinations.
- 6. The polystyrene board shall not be used in contact with chimneys or other surfaces which could heat the board to a temperature greater than 150° Fahrenheit. Provide clearance from heat sources in conformance with the National Fire Protection Association publication NFPA No. 89M.
- 7. The polystyrene insulation board shall be coated so that no portion is exposed. The requirements shall be carefully observed at the base of the insulation, around all doors and windows, around all wall penetrations for utilities and other wall penetrations or openings.
- 8. All areas, where the system joins other materials or terminates, shall be protected from moisture intrusion with a product or method specified by manufacturer.

- 9. All joints shall be made so that the caulking and sealing cements can be removed and replaced. The sealant and caulks shall have a 20-year performance warranty. It should be noted that the caulks and sealants have to be periodically replaced by the owner or as specified by the manufacturer depending on the conditions of caulks, sealants or adhesives.
- 10. No sealant shall be applied to the system until it has previously cured 14 to 21 days. Backer rod may be installed to prevent water intrusion during curing.
- 11. The exterior cementitious coating shall be applied in one coat to a minimum 3/8 inch thickness. The metal lath shall be embedded in the coating. Fasteners for the lath shall penetrate 1 inch minimum into the wood studs. Flashing, corner reinforcement, and metal trim shall be installed as set forth by American Building & Cement Products, Inc. The stucco shall be applied at ambient temperature ranging from 40° Fahrenheit to 110° Fahrenheit by applicators approved by American Building & Cement Products, Inc. Woven wire, 1 inch, 20 gauge galvanized stucco netting lath shall be applied tightly over substrate using 11 gauge galvanized roofing nails with 1/2 inch head spaced 6 inches on center or 16 gauge, 1 3/4 inch long galvanized staples spaced 6 inches on center with a minimum 1 inch penetration.

Staples shall have a minimum crown width of 1/2 inch. Care shall be taken to avoid over-driving fasteners. Lath shall be applied with 1/2 inch end and side laps. Lath shall be pulled tight so it will be flat against the substrate.

MANUFACTURER'S WARRANTY:

American Building & Cement Products, Inc. shall warrant the Durawall system for 20 years against faulty performance. The warranty shall include correction of delamination, chipping, peeling, blistering, flaking, and other serious deterioration of the system. Should any such defects occur, American Building & Cement Products, Inc. shall make a prorata allowance for replacement, or pay the owner the amount of the allowance. American Building & Cement Products, Inc. shall not be liable for damages or defects resulting from misuse, natural catastrophes (other than hail), casualty or other causes beyond the control of American Building & Cement Products, Inc.

The installation of the Durawall system shall be in accordance with the American Building & Cement Products, Inc. application instructions and the plans and specifications approved by American Building & Cement Products, Inc. If American Building & Cement Products, Inc. finds that the installation deviates significantly from the application instructions and the approved plans and specification, American Building & Cement Products, Inc. shall notify the owner, HUD and the builder, that the installation is not satisfactory.

This warranty does not relieve the builder, in any way, of responsibility under the terms of the Builder's Warranty required by the National Housing Act or under any provisions applicable to any other housing program. A copy of this warranty shall be furnished by the builder to the owner.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

- 1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
- 2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
- 3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
- 4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development Technical Suitability of Products Fees P.O. Box 954199 St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

- conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
- the manufacturer has changed its organizational form without notifying HUD, or
- 3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.